

**Amendments to the Claims:**

Claims 27, 54-60, 63 and 64 were previously cancelled.

Please amend claims 1, 4-10, 13, 16, 28, 31-37, 40, 43, 46, 47, 61, 62, 65, 66, 68 and 69 (the changes in the claim are shown with ~~strikethroughs~~ for deleted matter and underlining for added matter).

A complete listing of the claims is listed below with the proper claim identifiers; this listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 (Currently amended) A method for identifying an antagonist of at least one of ~~selected~~ first and second chemoattractant receptors, comprising:
  - providing an apparatus comprising an upper chamber and a lower chamber separated by a porous membrane;
  - placing a candidate antagonist and a cell population comprising the first and second ~~selected~~ chemoattractant receptors in the upper chamber;
  - placing an inhibitory concentration of a ligand for the first ~~selected~~ chemoattractant receptor in the lower chamber;
  - placing an inhibitory concentration of a ligand for the second ~~selected~~ chemoattractant receptor in the lower chamber; and
  - monitoring movement of the cell population from the upper chamber to the lower chamber, wherein the movement identifies the candidate antagonist as an antagonist of at least one of the first and second ~~selected~~ chemoattractant receptors.
2. (Previously presented) The method of claim 1, wherein at least two candidate antagonists are placed with the cell population in the upper chamber.
3. (Original) The method of claim 1, wherein the candidate antagonist is a peptide, peptide-like molecule, non-peptidyl organic compound, inorganic compound, nucleic acid or antibody.

4. (Currently amended) The method of claim 1, wherein the inhibitory concentration of the ligand for the first ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 50% of maximal ligand-activated cell migration.

5. (Currently amended) The method of claim 1, wherein the inhibitory concentration of the ligand for the first ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 95% of maximal ligand-activated cell migration.

6. (Currently amended) The method of claim 1, wherein the inhibitory concentration of the ligand for the first ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 100% of maximal ligand-activated cell migration.

7. (Currently amended) The method of claim 1, wherein the inhibitory concentration of the ligand for the second ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 50% of maximal ligand-activated cell migration.

8. (Currently amended) The method of claim 1, wherein the inhibitory concentration of the ligand for the second ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 95% of maximal ligand-activated cell migration.

9. (Currently amended) The method of claim 1, wherein the inhibitory concentration of the ligand for the second ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 100% of maximal ligand-activated cell migration.

10. (Currently amended) The method of claim 1, wherein the ~~selected~~ first and second chemoattractant receptors are each independently a chemokine receptor.

11. (Original) The method of claim 10, wherein the chemokine receptor is selected from the group consisting of CCR, CXCR, CX3CR, and XCR classes of chemokine receptors.

12. (Original) The method of claim 11, wherein the chemokine receptors are CXCR1, CXCR2, CXCR3, CXCR4, CXCR5, CCR1, CCR2, CCR3, CCR4, CCR5, CCR6, CCR7, CCR8, CCR9, CCR10, CCR11, CX3CR1 or XCR1.

13. (Currently amended) The method of claim 1, wherein the ligand for the first ~~selected~~ chemoattractant receptor is a chemokine.

14. (Previously presented) The method of claim 13, wherein the chemokine is selected from the group consisting of CCR, CXCR, and CX3CR receptor ligands.

15. (Original) The method of claim 14, wherein the chemokine is IL-8, GCP-2, Gro  $\alpha$ , Gro  $\beta$ , Gro  $\gamma$ , ENA-78, PBP, MIG, IP-10, I-TAC, SDF-1 $\alpha$ , BLC, MIP-1 $\alpha$ , MIP-1 $\beta$ , RANTES, HCC-1, HCC-2, HCC-3, HCC-4, MCP-1, MCP-2, MCP-3, MCP-4, eotaxin-1, eotaxin-2, TARC, MDC, MIP-3 $\alpha$ , MIP-3 $\beta$ , 6CKine, I-309, TECK, lymphotactin, fractalkine, TCA-4, Exodus-2, Exodus-3, or CK $\beta$ -11.

16. (Currently amended) The method of claim 1, wherein the ligand for the second ~~selected~~ chemoattractant receptor is a chemokine.

17. (Previously presented) The method of claim 16, wherein the chemokine is selected from the group consisting of CCR, CXCR, and CX3CR receptor ligands.

18. (Original) The method of claim 17, wherein the chemokine is IL-8, GCP-2, Gro  $\alpha$ , Gro  $\beta$ , Gro  $\gamma$ , ENA-78, PBP, MIG, IP-10, I-TAC, SDF-1 $\alpha$ , BLC, MIP-1 $\alpha$ , MIP-1 $\beta$ ,

RANTES, HCC-1, HCC-2, HCC-3, HCC-4, MCP-1, MCP-2, MCP-3, MCP-4, eotaxin-1, eotaxin-2, TARC, MDC, MIP-3 $\alpha$ , MIP-3 $\beta$ , 6Ckine, I-309, TECK, lymphotactin, fractalkine, TCA-4, Exodus-2, Exodus-3, or CK $\beta$ -11.

19. (Previously presented) The method of claim 1, wherein the ligands for the first and the second chemokine receptors are placed in the lower chamber simultaneously.

20. (Previously presented) The method of claim 1, wherein the ligands for the first and the second chemokine receptors are placed in the lower chamber in series.

21. (Previously presented) The method of claim 1, wherein the candidate antagonist is placed before at least one of the ligands.

22. (Previously presented) The method of claim 1, wherein monitoring movement comprises measuring a signal.

23. (Original) The method of claim 22, wherein the signal is a fluorescent signal.

24. (Previously presented) The method of claim 1, wherein monitoring movement comprises counting cells using a microscope.

25. (Previously presented) The method of claim 1, wherein monitoring movement comprises labeling cells with a marker.

26. (Original) The method of claim 25, wherein the marker is a dye or a radioactive label.

27. (Cancelled)

28. (Currently amended) A method for identifying an antagonist of at least one of ~~selected~~ first and second chemoattractant receptors, comprising:  
    providing an apparatus comprising an upper chamber and a lower chamber separated by a porous membrane;  
    placing a candidate antagonist and a first cell population and a second cell population in the upper chamber, wherein the first cell population comprises the first ~~selected~~ chemoattractant receptor and wherein the second cell population comprises the second ~~selected~~ chemoattractant receptor;  
    placing an inhibitory concentration of a ligand for the first ~~selected~~ chemoattractant receptor in the lower chamber;  
    placing an inhibitory concentration of a ligand for the second ~~selected~~ chemoattractant receptor in the lower chamber; and  
    monitoring movement of the first and the second cell populations from the upper chamber to the lower chamber, wherein the movement identifies the candidate antagonist as an antagonist of at least one of the first and second ~~selected~~ chemoattractant receptors.

29. (Previously presented) The method of claim 28, wherein at least two candidate antagonists are placed with the first and the second cell populations in the upper chamber.

30. (Original) The method of claim 28, wherein the candidate antagonist is a peptide, peptide-like molecule, non-peptidyl organic compound, inorganic compound, nucleic acid or antibody.

31. (Currently amended) The method of claim 28, wherein the inhibitory concentration of the ligand for the first ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 50% of maximal ligand-activated cell migration.

32. (Currently amended) The method of claim 28, wherein the inhibitory concentration of the ligand for the first ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 95% of maximal ligand-activated cell migration.

33. (Currently amended) The method of claim 28, wherein the inhibitory concentration of the ligand for the first ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 100% of maximal ligand-activated cell migration.

34. (Currently amended) The method of claim 28, wherein the inhibitory concentration of the ligand for the second ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 50% of maximal ligand-activated cell migration.

35. (Currently amended) The method of claim 28, wherein the inhibitory concentration of the ligand for the second ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 95% of maximal ligand-activated cell migration.

36. (Currently amended) The method of claim 28, wherein the inhibitory concentration of the ligand for the second ~~selected~~ chemoattractant receptor inhibits cell migration greater than or equal to about 100% of maximal ligand-activated cell migration.

37. (Currently amended) The method of claim 28, wherein the first and second ~~selected~~ chemoattractant receptors are each independently a chemokine receptor.

38. (Original) The method of claim 37, wherein the chemokine receptor is selected from the group consisting of CCR, CXCR, CX3CR, and XCR classes of chemokine receptors.

39. (Original) The method of claim 38, wherein the chemokine receptors are CXCR1, CXCR2, CXCR3, CXCR4, CXCR5, CCR1, CCR2, CCR3, CCR4, CCR5, CCR6, CCR7, CCR8, CCR9, CCR10, CCR11, CX3CR1 or XCR1.

40. (Currently amended) The method of claim 28, wherein the ligand for the first selected chemoattractant receptor is a chemokine.

41. (Previously presented) The method of claim 40, wherein the chemokine is selected from the group consisting of CCR, CXCR, and CX3CR receptor ligands.

42. (Original) The method of claim 41, wherein the chemokine is IL-8, GCP-2, Gro  $\alpha$ , Gro  $\beta$ , Gro  $\gamma$ , ENA-78, PBP, MIG, IP-10, I-TAC, SDF-1 $\alpha$ , BLC, MIP-1 $\alpha$ , MIP-1 $\beta$ , RANTES, HCC-1, HCC-2, HCC-3, HCC-4, MCP-1, MCP-2, MCP-3, MCP-4, eotaxin-1, eotaxin-2, TARC, MDC, MIP-3 $\alpha$ , MIP-3 $\beta$ , 6CKine, I-309, TECK, lymphotactin, fractalkine, TCA-4, Exodus-2, Exodus-3, or CK $\beta$ -11.

43. (Currently amended) The method of claim 28, wherein the ligand for the second selected chemoattractant receptor is a chemokine.

44. (Previously presented) The method of claim 43, wherein the chemokine is selected from the group consisting of CCR, CXCR, and CX3CR receptor ligands.

45. (Original) The method of claim 44, wherein the chemokine is IL-8, GCP-2, Gro  $\alpha$ , Gro  $\beta$ , Gro  $\gamma$ , ENA-78, PBP, MIG, IP-10, I-TAC, SDF-1 $\alpha$ , BLC, MIP-1 $\alpha$ , MIP-1 $\beta$ , RANTES, HCC-1, HCC-2, HCC-3, HCC-4, MCP-1, MCP-2, MCP-3, MCP-4, eotaxin-1, eotaxin-2, TARC, MDC, MIP-3 $\alpha$ , MIP-3 $\beta$ , 6CKine, I-309, TECK, lymphotactin, fractalkine, TCA-4, Exodus-2, Exodus-3, or CK $\beta$ -11.

46. (Currently amended) The method of claim 28, wherein the ligands for the first and the second ~~selected~~ chemoattractant receptor are placed in the lower chamber simultaneously.

47. (Currently amended) The method of claim 28, wherein the ligands for the first and the second ~~selected~~ chemoattractant receptor are placed in the lower chamber in series.

48. (Previously presented) The method of claim 28, wherein the at least one candidate antagonist is placed in the apparatus before the at least one of the ligands.

49. (Previously presented) The method of claim 28, wherein the monitoring movement comprises measuring a signal.

50. (Original) The method of claim 49, wherein the signal is a fluorescent signal.

51. (Previously presented) The method of claim 28, wherein monitoring movement comprises counting cells using a microscope.

52. (Previously presented) The method of claim 28, wherein monitoring movement comprises labeling cells with a marker.

53. (Original) The method of claim 52, wherein the marker is a dye or a radioactive label.

54-60. (Cancelled)

61. (Currently amended) The method of claim 1, wherein the first and second ~~selected~~ chemoattractant receptors are selected from the group consisting of C5aR, FPRL1 receptor, CXCR4, CXCR3, CCR1, and CCR9.



62. (Currently amended) The method of claim 28, wherein first and second ~~selected~~ chemoattractant receptors are selected from the group consisting of C5aR, FPRL1 receptor, CXCR4, CXCR3, CCR1, and CCR9.

63. (Cancelled)

64. (Cancelled)

65. (Currently amended) The method of claim 1, further comprising a step of determining whether an identified antagonist is an antagonist for one of the first ~~selected~~ chemoattractant receptors, the second ~~selected~~ chemoattractant receptor, or both.

66. (Currently amended) The method of claim 65, wherein determining is performed by a method comprising the steps of:

a) determining whether the identified antagonist is the antagonist for the first ~~selected~~ chemoattractant receptor comprising the steps of:

i) placing a first ~~second~~ cell population comprising the first ~~selected~~ chemoattractant receptor with a candidate antagonist in the upper chamber,

ii) placing an inhibitory concentration of a ligand for the first ~~selected~~ chemoattractant receptor in the lower chamber, and

iii) assaying monitoring movement of the first second cell population from the upper chamber to the lower chamber, wherein the movement identifies the candidate antagonist as an antagonist of the first ~~selected~~ chemoattractant receptor; and

b) determining whether the identified antagonist is the antagonist for the second ~~selected~~ chemoattractant receptor comprising the steps of:

i) placing a second third cell population comprising the second ~~selected~~ chemoattractant receptor with the candidate antagonist in the upper chamber,

ii) placing an inhibitory concentration of a ligand for the second ~~selected~~ chemoattractant receptor in the lower chamber, and

iii) ~~assaying~~ monitoring movement of the second third cell population from the upper chamber to the lower chamber, wherein the movement identifies the candidate antagonist as an antagonist of the second ~~selected~~ chemoattractant receptor.

67. (Previously presented) The method of claim 65, wherein determining is performed by calcium mobilization assay or cell migration assay.

68. (Currently amended) The method of claim 28, further comprising a step of determining whether an identified antagonist is an antagonist for one of the first ~~selected~~ chemoattractant receptors, the second ~~selected~~ chemoattractant receptor, or both.

69. (Currently amended) The method of claim 68, wherein determining is performed by a method comprising the steps of:

a) determining whether the identified antagonist is the antagonist for the first ~~selected~~ chemoattractant receptor comprising the steps of:

i) placing a first cell population comprising the first ~~selected~~ chemoattractant receptor and a candidate antagonist in the upper chamber,

ii) placing an inhibitory concentration of a ligand for the first ~~selected~~ chemoattractant receptor in the lower chamber, and

iii) monitoring movement of the first cell population from the upper chamber to the lower chamber, wherein the movement identifies the candidate antagonist as an antagonist of the first ~~selected~~ chemoattractant receptor; and

b) determining whether the identified antagonist is the antagonist for the second ~~selected~~ chemoattractant receptor comprising the steps of:

- i) placing a second cell population comprising the second selected chemoattractant receptor and the candidate antagonist in the upper chamber,
- ii) placing an inhibitory concentration of a ligand for the second selected chemoattractant receptor in the lower chamber, and
- iii) monitoring movement of the second cell population from the upper chamber to the lower chamber, wherein the movement identifies the candidate antagonist as an antagonist of the second selected chemoattractant receptor.

70. (Previously presented) The method of claim 68, wherein determining is performed by calcium mobilization assay or cell migration assay.